







ommands around the world are bolstering their mission readiness and saving as much as 30% or more annually in utility costs by updating their unreliable and failing energy and water infrastructure with state-of-the-art equipment and systems at minimal upfront cost.

Recovering the cost and productivity drain of an inefficient or antiquated energy infrastructure is more than just a good management practice – it's vitally important to fleet readiness.

That's why refined financing and contracting tools have been put in place to help Commands achieve higher performance levels by alleviating the unnecessary financial and operational burden of a failing or inefficient energy infrastructure.

Energy costs are the single largest line item in the shore facility operating budget. They can force unpleasant decisions on a Commanding Officer facing limited budgets and downsizing.

Now utility costs can be contained and equipment performance enhanced with minimal upfront costs to the Government through energy service contracts based on alternative financing methods.

Alternative financing allows energy infrastructure improvements to be financed by a third party, either an Energy Service Company (ESCO) or a local regulated Utility Company.

# **Improving Fleet Readiness Through Alternative Financing**

Everyone can participate. Because alternative financing is virtually self-funding, energy savings can reduce utility expenditures while helping to finance capital improvements.

Commands are improving fleet readiness by:

- Reducing energy and water consumption and costs
- Employing state-of-the-art energy efficiency technology
- Improving operations and maintenance
- Improving facility infrastructures

## **Intelligent Energy and Water Use**

Using less energy and being more efficient with the energy you do use can produce savings generally ranging from 15% to 30% annually. Alternative financing allows for a full range of energy solutions, including:

- Boiler Plant Improvements
- Building Automation Systems
- Building Envelope Improvements
- Chiller Plant Improvements
- Cogeneration
- Compressed Air systems
- Electric Distribution System
- Electric Motors and Drives

- HVAC Systems
- Lighting/Lighting Controls
- Peak Shaving
- Rebates & Rate Reductions
- Renewable Energy Systems
- Water & Steam Distribution Systems
- Water Conservation Projects









## Why is Alternative Financing So Important?

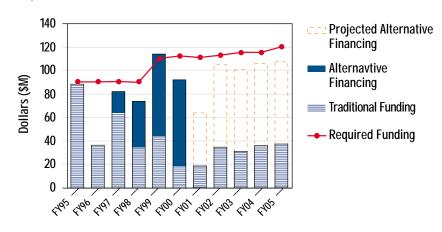
The Department of the Navy has a clear mandate to reduce utilities and their associated costs. Executive Order 13123 requires all Federal agencies to reduce energy usage 35% by 2010 compared to baseline 1985.

Meeting this goal will require in excess of \$100 million in projects each year, in a time when traditional funding sources have virtually dried up. Alternative financing provides the brightest avenue for achieving improved operations through energy improvements and cost reductions.

While the Department of the Navy has already reduced energy consumption 26% compared to the 1985 baseline, most fast payback projects have been implemented. Many capital-intensive, long-payback projects remain.

For many Commands, alternative financing is the solution.

## **Project Funding**



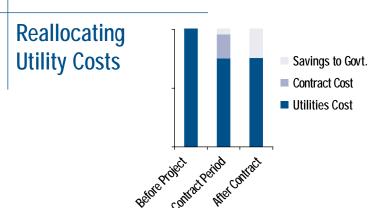
## **How Alternative Financing Works**

Alternative financing creates immediate benefits with minimal upfront cost. The contractor finances the cost of the project and is repaid by funds saved through energy and operations and maintenance (O&M) savings.

Through these energy and O&M savings, the contractor is repaid for its services, including:

- Design and development costs
- · Energy audits
- Installation costs
- · Overhead, profit and financing
- Operation and Maintenance Costs (upon request)

During the contract period, the Government keeps the difference between the savings and the contractor payments. Two-thirds of the energy cost savings remain available to the installation for investment through the fiscal year following the fiscal year for which the funds were appropriated. Chapter 12 of the DoD Financial Management Regulations provides guidance on this subject.



## **Alternative Financing Tools**

Two contracting mechanisms exist to provide alternative financing. They are Utility Energy-Efficiency Service Contracts (UESC), also known as Demand Side Management (DSM) Contracts, and Energy Savings Performance Contracts (ESPC).

# The Utility Energy-Efficiency Service (UESC) / DSM Contract

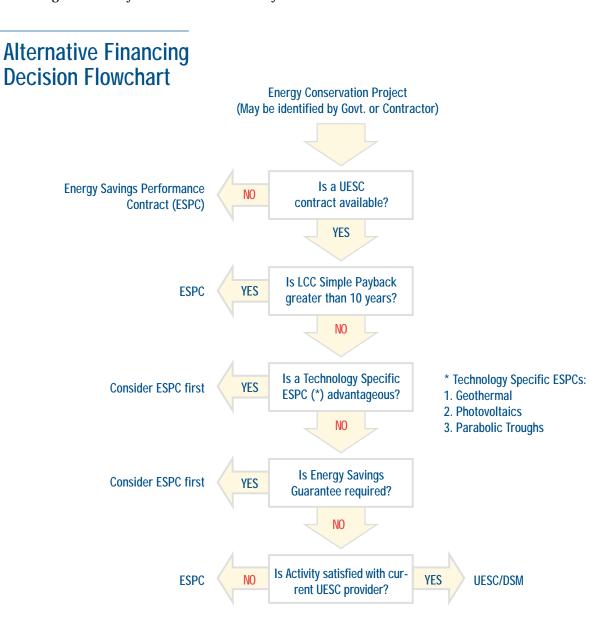
- Sole-source to a regulated utility
- Positive Net Present Value (computed over 10 years)
- Projects not always financed

# The Energy Savings Performance Contract (ESPC)

- Competitive award to an Energy Service Company (ESCO)
- Savings exceed payments each year of the term
- Energy Savings "guaranteed"

## **Choosing the Best Approach For Your Command**

The following graph outlines a few key decision points in determining which alternative financing vehicle may be best suited to meet your needs.



# **Comparing UESC and ESPC**

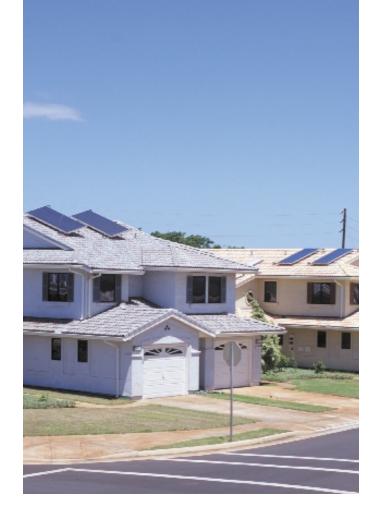
- Claimant approval required for both UESC/DSM and ESPC
- O&M is optional under both approaches
- Project bundling is allowed under both.
- Measurement and verification of savings is mandatory under ESPC and may be included under UESC.











## We're Here to Serve You

The Naval Facilities Engineering Command provides the technical, contractual, and legal services and support needed to execute all types of alternative financing contracts. (OPNAVINST 4100.5D)

#### **Services Include:**

- Contract Initiation/Execution
- Training for Energy Managers
- Contractual, Legal, Engineering and Technical Support
- Construction Management and Oversight
- Energy Projects Tracking and Reporting

We will assist you in identifying the best contracting vehicle for your projects.

#### **UESC/DSM Contracts**

- Utility Area-wide (Basic Ordering Agreement)
- GSA Area-wide

### **ESPC Contracts**

- DON independent or regional ESPCs
- Army Corps of Engineer Contracts
- DOE Super ESPCs



## **The Alternative Financing Process**



## For Additional Information, Visit the Following Websites:

### **Navy Energy Website**

http://energy.navy.mil

#### **FEMP Website**

www.eren.doe.gov/femp/

### **Energy Efficiency and Renewable Energy Network**

www.eren.doe.gov/

#### National Energy Conservation Policy Act (42 USC 8287 Sec. 801-804)

www4.law.cornell.edu/uscode/42

#### **Defense Authorization Act for FY-91 (10 USC 2865)**

www4.law.cornell.edu/uscode/10/2865.html

### **DoD FMR Website**

www.dtic.mil/comptroller/fmr/12/12\_12.pdf

